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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/553,971	04/21/2000	Sai V. Allavarpu	5181-48600	6569

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EXAMINER
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SHAH, NILESH R

ART UNIT	PAPER NUMBER
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2127

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DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/553,971	<b>Applicant(s)</b> ALLAVARPU ET AL.	
	<b>Examiner</b> Nilesh R Shah	<b>Art Unit</b> 2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-38 are presented for examination.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chessman et al (6,680,933) (hereinafter Chessman) and further in view of Maresco (6,418,458).

4. As per claim 1 Chessman teaches scheduler system comprising:  
a primary scheduler which is executable to schedule requests for networked data resources (col. 11 lines 5- 30, fig. 8 element 144a) and  
a secondary scheduler, wherein the secondary scheduler is executable to receive a plurality of requests from a multi-threaded application and send the requests to the primary scheduler (col. 11 lines 5- 30, fig. 8 element 144a). Chessman does not specifically teach the use of a thread safe system.

Maresco teaches a thread safe system (col. 2 lines 30- 38).

5. As per claim 2 Maresco teaches a system, wherein the primary scheduler is single-threaded (col. 2 lines 47-52).
6. As per claim 3, Maresco teaches a system, wherein the secondary scheduler is multi-threaded (col. 1 lines 32 – 38, col. 2 lines 47-52).
7. As per claim 4, Cheesman teaches a system wherein the secondary scheduler is executable to receive the plurality of requests (col. 11 lines 5- 30, fig. 8 element 144a). Cheesman does not specifically teach the use of a multi- thread safe system.

Maresco teaches a multi thread safe system (col. 2 lines 30- 38, col. 6 lines 15-19).

8. As per claim 5, Cheesman teaches a system wherein the primary scheduler is executable to receive the plurality of requests from the secondary scheduler (col. 11 lines 5- 30, fig. 8 element 144a). Cheesman does not specifically teach the use of a multi- thread safe system.

Maresco teaches a multi thread safe system (col. 2 lines 30- 38, col. 6 lines 15-19).

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9. As per claim 6, Cheesman teaches a system wherein the resources comprise a management information server (col. 11 lines 5- 30, fig. 8 element 144a). Cheesman does not specifically teach the use of a multi- thread manager.

Maresco teaches a multi thread manager (col. 5 lines 40-47).

10. As per claim 7, Cheesman teaches a system further comprising: a management information server coupled to the primary scheduler through a management interface, wherein the primary scheduler is operable to send the requests to one or more managed objects through the management information server (col. 11 lines 5- 30, fig. 8 element 144a).

11. As per claim 8, Maresco teaches a system wherein the managed objects comprise one or more objects corresponding to a telephone network (col. 2 lines 60-67).

12. As per claim 9, Maresco teaches a system wherein the managed objects comprise one or more objects corresponding to a telecommunication device (col. 2 lines 60-67).

13. As per claim 10, Maresco teaches a management interface comprises Portable management interface, wherein PMI is a single thread, and wherein PMI comprises a plurality of functions, which are operable to carry out the requests (col. 2 lines 53-67).

14. As per claim 11, Maresco teaches wherein the requests comprise callback functions, and wherein the callback functions are executable to send responses to the requests to the multi-threaded application (col. 3 lines 37-48).
15. As per claim 12, Cheesman teaches a system wherein the primary scheduler comprises a primary queue, which is operable to hold pending requests and responses to the requests (col. 11 lines 26 30).
16. As per claim 13, Cheesman teaches a system wherein the secondary scheduler comprises a secondary queue which is operable to hold pending requests (col. 11 lines 26 30).
17. As per claim 14, Cheesman teaches a system further comprising:  
a communication pipe between the primary scheduler and secondary scheduler, wherein the secondary scheduler uses the communication pipe to wake the primary scheduler prior to sending one of the requests to the primary scheduler (col. 11 lines 5- 30, fig. 8)
18. As per claim 15, Chessman teaches a method for using a management interface for management of a plurality of managed objects on a network, the method comprising:  
  
scheduling the plurality of management requests in a secondary queue in the secondary scheduler after receiving the management requests from the manager application (col. 11 lines 5- 30, fig. 8 element 144a);

scheduling the management requests in a primary queue in the primary scheduler (col. 11 lines 25-30);

executing the management requests on the managed objects after scheduling the management requests in the primary queue (col. 11 lines 25-30). Cheesman does not specifically teach the use of a multi- thread safe system.

Maresco teaches a multi thread safe system (col. 2 lines 30- 38, col. 6 lines 15-19).

19. As per claim 16 Maresco teaches executing the management requests on the managed objects further comprises sending the management requests to a management information server coupled to the managed objects (col. 2 lines 53-67, col. 3 lines 33-36).

20. As per claim 17, Cheesman teaches a method wherein each of the management requests comprises a corresponding callback function (col. 8 lines 62-67).

21. As per claim 18 Cheesman teaches a method further comprising:  
receiving a response to one of the management requests from one of the managed objects after executing that management requests on one of the managed objects (col. 9 lines 11-20);

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executing the corresponding callback function for that management request (col. 8 lines 62-67). Cheesman does not specifically teach the use of a multi- thread safe system.

Maresco teaches a multi thread safe system (col. 2 lines 30- 38, col. 6 lines 15-19).

22. As per claim 19, Chessman teaches a method further comprising:

enqueueing the response in the primary queue after receiving the response from one of the managed objects (col. 6 line 61 – col. 7 line 10) and

dequeueing the response from the primary queue before executing the corresponding callback function to send the response (col. 6 line 61 – col. 7 line 10, col. 8 lines 62-67).

Cheesman does not specifically teach the use of a multi- thread safe system.

Maresco teaches a multi thread safe system (col. 2 lines 30- 38, col. 6 lines 15-19).

23. Claim 20 is rejected based on the same rejection for claim 10 above.

24. Claims 21-22 are rejected based on the same rejections for claims 8-9 above.

25. As per claim 23 Cheesman teaches a method wherein the receiving the plurality of management requests from the manager application into the secondary scheduler in the manner comprises receiving the plurality of management requests. (col. 11 lines 5- 30,



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fig. 8 element 144a). Cheesman does not specifically teach the use of a multi- thread manager.

Maresco teaches a multi thread manager (col. 5 lines 40-47).

26. As per claim 24 Chessman teaches a method, wherein sending the management requests to the primary scheduler comprises dispatching the management requests (col. 11 lines 5-30, fig. 8 element 144a). Cheesman does not specifically teach the use of a multi- thread manager.

Maresco teaches a multi thread manager (col. 5 lines 40-47).

27. As per claim 25 Chessman teaches a method wherein the primary scheduler is executed in a single thread associated with the management interface, and wherein the secondary scheduler is executed in at least one different thread col. 11 lines 5- 30, fig. 8 element 144a).

28. As per claim 26 Chessman teaches a method, wherein the secondary scheduler is multi-threaded (col. 1 lines 32 – 38, col. 2 lines 47-52).

29. Claim 27-32, 35- 38 are rejected based on the same rejections as claims 15- 20, 23-26 respectfully.

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30. Claims 33-34 are rejected based on the same rejections as claims 8-9 above.

*Conclusion*

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nilesh R Shah whose telephone number is 703-305-8105.

The examiner can normally be reached on Monday-Friday 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NS  
April 14, 2004

  
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